



UNITED STATES PATENT AND TRADEMARK OFFICE

157
UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/087,377	03/01/2002	Qingsheng Zhu	279.407US1	3372

21186 7590 02/16/2005

SCHWEGMAN, LUNDBERG, WOESSNER & KLUTH, P.A.
P.O. BOX 2938
MINNEAPOLIS, MN 55402

EXAMINER

ALTER, ALYSSA M

ART UNIT	PAPER NUMBER
----------	--------------

3762

DATE MAILED: 02/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/087,377

Applicant(s)

ZHU ET AL.

Examiner

Alyssa M Alter

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 19-25 is/are allowed.
- 6) ☒ Claim(s) 11, 12, 16-18 and 26-32 is/are rejected.
- 7) ☒ Claim(s) 13-15 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/19/02.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Art Unit: 3762

DETAILED ACTION

The amendment filed on January 10, 2005 (paper No. 3) has been received and considered. By this amendment, claims 1-10 have been canceled and claims 11-32 are now pending in the application.

Response to Arguments

Applicant's arguments, see page 7, filed January 10, 2005, with respect to Common Ownership, have been fully considered and are persuasive. The 112 Rejections of claims 11-18, 13-16 and 19-25 and the 103 Rejections of claims 13-14 and 19-20 has been withdrawn.

However, the examiner still maintains the 102 Rejections of claims 11-12 and 16-18 as being anticipated by Salo (US Patent Publication 20030125774). Therefore, claims 11-12 and 16-18 stand and 26 and 29-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Salo (US Patent Publication 20030125774).

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 11-12 and 16-18 stand and 26 and 29-32 are rejected under 35 U.S.C. 102(e) as being anticipated by Salo (US Patent Publication 20030125774).

The Applicant argues that Salo does not disclose the measuring of the myocardium temperature. However Salo does measure the “averaged blood temperature in the coronary sinus” (page 4, paragraph 41). According the Applicant’s specification on page 2, paragraph 13, in lines 8-9, “the temperature of the coronary sinus comes from the temperature of the myocardium” and in lines 13-15, “Thus, monitoring the temperature of the coronary sinus monitors the temperature of the myocardium”. Since the Applicant states that the measurement of the coronary sinus temperature is indicative of the myocardium temperature, therefore Salo inherently teaches the measurement of the myocardium temperature.

As to claims 26 and 29-31, Salo discloses on page 4, paragraph 42, that “the lead system 1 may already include an open lumen 11 for an over-the-wire installation technique.” Therefore, Salo discloses an over the wire implantable lead.

As to claims 29-30 and as previously stated in the Non-Final Rejection in regards to claims 16-17, “the electrical impulses delivered to the electrode 16 can be adaptively adjusted by the detector/energy delivery system 2 based on temperature outputs from the thermal sensor 9. The thermal sensor 9 of a system according to the present invention can measure the temperature of the blood returning through the coronary sinus after having passed through myocardial tissue” (page 4, paragraph 44). Since the device can measure the temperature, it can inherently measure the temperature change.

Art Unit: 3762

As to claim 31 and as previously stated in the Non-Final Rejection in regards to claim 18, "The difference between the current temperature and a long-term average temperature could also be used as an activity indicator, since increased temperature with a relatively short rise time (on the order of seconds or minutes) would be indicative of increased activity"(page 4, paragraph 48). Therefore a change in activity would inherently change the functional status of the heart.

As to claim 32, Salo discloses on page 1, paragraph 9 "the detector/energy delivery system can also modify the delivery of electrical signals based on the sensed temperature difference." Salo detects a difference in the temperature and therefore inherently detects a decrease in temperature.

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Art Unit: 3762

1. Claims 27-28 recite the limitation "the a first thermal sensor" in line 1 of claim 27. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests the removal of "the" in claim 27.
2. Claim 29 recites the limitation "the second temperature" in line 2. There is insufficient antecedent basis for this limitation in the claim. The examiner suggests changing "the" to --a--.

Drawings

The drawings are objected to because the Applicant fails to indicate in figure 1, the first thermal sensor 142 as "one or more thermal sensors 140", as previously indicated in the drawings of figure 1 submitted in March 1, 2003.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

Art Unit: 3762

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Allowable Subject Matter

1. Claims 27 and 28 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
2. Claims 13-15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
3. Claims 19-25 are allowed due to the withdrawal of the 103 Rejections on the grounds of Common Ownership.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a). A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Art Unit: 3762

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M Alter whose telephone number is (571) 272-4939. The examiner can normally be reached on M-F 9am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Alyssa M Alter
Examiner
Art Unit 3762

GEORGE H. EVANISIO
PRIMARY EXAMINER
2/14/5